NOTICE

HSR Division January 16, 2004 Notice No. 0133

Workers' Rights and Responsibilities for Performing Radiological Work

Purpose

The purpose of this Notice is to consolidate from a variety of sources (e.g., LIR 402-700-01, Occupational Radiation Protection Requirements, and radiological worker training materials), worker rights and responsibilities as they pertain to performing radiological work activities at the Laboratory.

Background

An internal assessment report has indicated that assessors could not identify a clear statement of all individual worker rights and responsibilities within the radiation worker training program.

Therefore, the following requirements shall be implemented until the most current list of worker rights and responsibilities are incorporated into LIR 402-700-01.

Requirements/ Instructions **Guidance Note:** The rights and responsibilities listed below are subject to modification based on the forthcoming revision to LIR 402-700-01. Any worker performing radiological work activities at the Laboratory must review and understand the following rights and responsibilities:

WORKERS' RIGHTS

Workers' rights are related to implementation of facility radiation protection programs.

- a. Workers who are authorized to enter areas posted for radiological hazards shall be informed or instructed in the following:
 - 1) risks of exposure to radiation and radioactive materials, including prenatal radiation exposure;
 - 2) basic radiological fundamentals and radiation protection concepts;
 - 3) controls, limits, policies, procedures, alarms, and other measures implemented at the facility to control doses, including both routine and emergency actions;
 - 4) worker responsibilities for implementing ALARA (as low as reasonably achievable) measures; and
 - 5) worker exposure reports that may be requested.

- b. Radiological hazards shall be communicated in facility orientation, pre-job briefings, on-site and facility radiological training or through work control documents such as hazard control plans (HCPs), radiation work permits (RWPs), facility work control documents or integrated work documents (IWDs).
- c. Individual radiation exposure data:
 - Written radiation exposure data provided to the individual shall include DOE site or facility name, the name of the individual, and the individual's social security number, employee number, or other unique identification number;
 - 2) Upon request from an individual terminating employment, records of exposure shall be provided to that individual as soon as the data are available, but not later than 90 days after termination. A written estimate of the radiation dose received by that individual based on available information shall be provided at that time of termination, if requested.
 - 3) The Laboratory shall provide an annual radiation dose report to each individual monitored during the year at that site or facility.
 - 4) An individual must be provided a report of his or her exposure data when a DOE contractor is required to report that individual's exposure to radiation and/or radioactive material or planned special exposure to the Department of Energy.
 - 5) An individual has the right to request a report of his or her exposure data at any time for any reason.
- d. Workers have the right to review radiological survey data.
- e. Workers have the right to report any radiological concerns to their supervisor, line manager, Safety Concern Program, HSR Division Office (7-4218), ES&H Hotline (5-7233), or NNSA/LASO (7-5105).
- f. Workers have the right to stop work if radiological work conditions/controls are unsafe (see LIR 401-10-01).
- g. Declared pregnant workers are protected from discrimination by Title VII of the Civil Rights Act of 1964, as amended, while reassigned to tasks in which exposure to occupational radiation is unlikely.

WORKERS' RESPONSIBILITIES

<u>General Responsibilities</u>: All workers must demonstrate responsibility and accountability through an informed, disciplined, and cautious attitude toward radiation and radioactive material. The worker must

- a. maintain radiation dose ALARA by using dose-reduction techniques;
- b. know the dose limits and the remaining dose available for the job where applicable;
- c. know the radiological conditions in the work area;
- d. obey the posted, written, and oral radiological control instructions and other work control documents (e.g., HCPs, RWPs, IWDs);
- e. take part in pre-job and post-job briefings;

- f. properly wear personnel protective equipment and clothing (PPE) when required by radiological work permits, HCPs, other work control documents, or postings;
- g. participate in internal dosimetry programs as assigned or directed;
- h. contact an RCT to survey materials and equipment before releasing them when required by postings, work control documents, or RCT direction;
- i. contact, and wait for, an RCT before entering high radiation and very high radiation areas;
- j. immediately contact HSR-1 when packages of radioactive material are received from transportation at the facility or activity;
- k. notify their supervisor of newly identified hazards or changing radiological conditions. Guidance Note: Communicate to HSR-1 (typically, the facility or area radiological control technician, RCT) and the worker's safety- and environment-responsible line management chain changes in work, processes, procedures, configurations, or controls that may affect radiological conditions of an operation or area;
- 1. complete assigned training;
- m. enter radiological areas only when authorized in writing;
- n. participate in the identification, analysis, and control of radiological hazards in accordance with the Integrated Work Management (IWM) process;
- o. remain aware of monitoring activities and follow required actions determined by monitoring data, including facility-specific emergency response to alarms;
- p. do not change monitoring system parameters unless trained, qualified, and authorized by HSR-1; and
- q. stop work when conditions or practices are unsafe.

<u>Workers' Responsibilities Regarding Dose Limits and Dosimeters:</u> Workers shall monitor their doses throughout the calendar year and during radiological activities to ensure that specified dose limits are not exceeded. Workers shall also know what dose limits apply to them and where to obtain dose reports.

- a. Workers must be responsible for complying with the DOE radiation dose limits
- b. Workers must (1) wear correctly their assigned dosimeters at all times in areas controlled for radiological purposes when required by signs, work control documents, or radiological control personnel and (2) ensure that the whole-body and personal nuclear accident dosimeters are worn on the front of the body between the shoulders and the waist. The whole-body dosimeter must be worn with the circular foil windows facing out and the side labeled THIS SIDE TOWARD CHEST against the chest. The foil windows *must not* be covered while the dosimeter is being worn, unless an RCT instructs otherwise (for example, bagging the dosimeter to prevent contamination). The foil windows are fragile and must be handled carefully.

- c. Workers shall not expose their dosimeter to non-work-related- sources of radiation such as medical, dental or security x-rays.
- d. Workers must participate in assigned dosimetry programs, including on-time exchange of dosimeters, bioassay sample kits, and keeping in vivo appointments. Workers must return their dosimeter(s) for processing at the required frequency, free of radioactive contamination. If the worker is instructed by the HSR-1 representative in the workplace to have a non-routine bioassay, the worker must go to HSR-4 for the whole-body count or in vitro bioassay kit.
- e. Workers shall not wear their dosimeter issued for LANL radiological work off-site. Workers must follow HSR-4 instructions when taking dosimeters on travel. If the dosimeter is inadvertently taken on travel, the worker must contact HSR-4.
- f. If a dosimeter is lost, off-scale, damaged or contaminated, the worker must take required actions. These actions are: 1) stop work activities; 2) place work activities in a safe condition; 3) alert others, as required (request that other workers read their pocket dosimeters); 4) immediately exit the area; and 5) notify an RCT.
- g. A pregnant worker is encouraged to voluntarily notify HSR-12, in writing that she is pregnant and after this notification she is then considered a declared pregnant worker.
- h. If a worker is visiting another site and being provided dosimetry by that site, the worker must provide the site visited with the address of the HSR-12 Radiation Information Management Team, MS E-546. If the visited site does not notify HSR-12 that dosimetry was provided, then it is the worker's responsibility to inform HSR-12 of this occupational exposure.
- i. If a worker or a member of their family has been administered radionuclides for diagnostic or therapeutic medical purposes, the worker must report this medical procedure to HSR-1 before returning to work. Routine medical or dental x-rays do not have to be reported, unless a TLD has been exposed to the x-rays.
- j. Workers must notify their immediate supervisor of changes in work assignment or process hazards that could lead to modified dosimetry requirements.
- k. Workers must follow procedures for worker dosimetry enrollment along with their supervisor.
- 1. Workers must notify their immediate supervisor upon approaching action levels and occupational dose limits.
- m. Workers must report lost dosimeters to HSR-1 and complete the lost badge form and submit it to HSR-4.
- n. Workers must ensure that the dosimeter being worn is assigned for the current monitoring period.
- o. Workers must ensure that extremity dosimeters are worn on the extremity for which they are intended and oriented as instructed, and as specified in the RWP, or other work control document.

- p. Workers must ensure that, when not being worn, the dosimeters are stored where they will not be exposed to temperatures above 100°F, direct sunlight, chemical vapors, physical abuse, or unusual radiation backgrounds.
 Guidance Note: Dosimeters need only be worn in areas or for activities that require them.
- q. Workers must control external dosimeters to keep them from becoming contaminated. If contamination is suspected, the worker must contact HSR-1 prior to returning the dosimeter back to HSR-4.

Workers' Responsibilities Regarding Posting, Signs and Labels:

- a. Workers shall be responsible for reading and complying with all the information on radiological posting, signs, and labels, including exit requirements.
- b. Radiological conditions may change and more than one radiological hazard may be identified on a posting, sign, and label. Therefore, it is the worker's responsibility to read all of the information prior to each entry and exit on postings, signs, and labels.
- c. Workers shall report faded or illegible postings to HSR-1.
- d. Workers shall communicate any operational changes that may affect area designations and postings to HSR-1.

Workers' Responsibilities Regarding Radiological Control Documents including RWPs and IWDs: There are five main responsibilities that a worker must fulfill when performing radiological work:

- 1. Ensure that you have been authorized by your management to perform the activities covered by the work control document. Entering radiological areas shall require prior written authorization.
- 2. Sign the RWP and IWD to indicate that you have read and understood the work control document before entering the area posted for radiological hazards.
- 3. Do not start the job and contact an RCT or your supervisor if you do not think the work control document is correct or you do not understand any part of the document.
- 4. Ensure that any changes to the work control document are made by the RCT supervisor and approved by a line manager before you start the job.
- 5. Obey any instructions written on the work control document and never make substitutions for specified requirements.

Workers' Responsibilities Regarding Emergency Alarms and Responses: Follow the instructions of RCTs, incident commanders, and emergency responders in accordance with laboratory and facility emergency response requirements. Workers must be able to identify the equipment and alarms and respond appropriately to each.

a. Workers must monitor themselves for contamination whenever specified by exit requirements. If a Personnel Contamination Monitor (PCM) alarms, workers must:

- 1) remain in the immediate area (until released by an RCT or HSR-1 health physicist);
- 2) notify an RCT;
- 3) minimize cross-contamination; and
- 4) do not attempt personnel decontamination.
- b. When an area radiation monitor alarms unexpectedly, workers shall take the following actions:
 - 1) stop work activities;
 - 2) exit the area and remain in a safe area nearby; and
 - 3) notify health physics operations (HSR-1), typically the facility or area RCT.
- c. If a CAM alarms, workers must take one of the following actions:
 - 1) Leave the area immediately if you do not have respiratory protection, notify an RCT, and remain outside the area until workers and the area are surveyed.
 - Stop the operation safely if you have respiratory protection, follow RCT instructions, and do not remove the respirator until surveyed for contamination by an RCT.
- d. In response to personnel injuries, workers shall follow these guidelines:
 - 1) For serious injuries, medical care takes priority over radiological concerns: call 911, administer first aid, and contact an RCT. The immediate health of the worker, rather than radiological control is the primary consideration.
 - 2) For minor injuries, radiological control takes priority: contact an RCT immediately, follow RCT instructions, have the wound surveyed for contamination, contact your supervisor, and administer first aid after decontamination. Have the worker report to HSR-2.
- e. If an accidental breach of/or leak from a radioactive system or a spill of radioactive material or radioactive liquid requires immediate response, the worker must follow the SWIMS (Stop, Warn, Isolate, Minimize, Secure) procedure:
 - 1) Stop and evaluate the situation.
 - 2) Warn others of the hazard and evacuate the area.
 - 3) Isolate the area.
 - 4) Minimize exposure to both contamination and radiation.
 - 5) Secure unfiltered ventilation, as appropriate.

Questions? Contact the HSR-RPO (667-4218).



The OIC for this notice is HSR-RPO, and the responsible division director is HSR-DD. This notice shall remain in effect until the rights and responsibilities listed in this notice are incorporated into the revision of LIR 402-700-01, Occupational Radiation Protection Requirements.